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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/581,560	07/17/2000	BERND BRUCHMANN	192286USOPCT	2525

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EXAMINER

SERGEANT, RABON A

ART UNIT	PAPER NUMBER
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1711

18

DATE MAILED: 04/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/581,560

Applicant(s)  
Bruchmann et al.

Examiner  
Rabon Sergent

Art Unit  
1711



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jan 28, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolff et al. ('207).

Patentees disclose the reaction of hexamethylene diisocyanate with cyclohexanol in the presence of a catalyst to yield a polyisocyanate mixture containing allophanate and isocyanurate groups. After reaction, the catalyst was deactivated and the residual isocyanate monomer was removed. See Comparative Example IX (disclosed within Table II as XI); column 3, lines 59+; column 4, lines 1+; column 5, lines 16+; column 7, lines 38+; and column 8, lines 1-6.

3. The Comparative Example differs from the instant invention in that the molar ratio of diisocyanate to alcohol within the comparative example is 50:1; whereas, the claims are limited to a ratio of 1.5 to 20:1. Still, Wolff et al. disclose within column 5 that the hydroxyl compounds are used in an amount of from 0.5 to 10 mole percent, based upon the molar amount of diisocyanate.

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This mole percent range corresponds to a molar ratio of diisocyanate to alcohol of 10 to 200:1.

The position is taken that it would have been obvious to operate at any ratio within this range,

including ratios which overlap those claimed.

4. In the Office action of December 3, 2002, the examiner indicated that the showings within the 37 CFR 1.132 declaration, filed October 30, 2002, had been considered; however, the position was taken that it is unclear that the results are unexpected. It was stated that the results appear to largely follow a consistent trend, in that as the mole percent of cyclohexanol increases, viscosity, NCO content, and hardness values systematically change. The examiner requested an explanation as to why applicants believe the results are unexpected. Within the response of January 28, 2003 to this request, applicants have argued that the results must be considered relative to a reaction system that lacks a cyclic alcohol component. This response is insufficient to remove the art rejection. Given the teachings of the prior art that require the presence of the alcohol component, it is not seen that a reaction system that lacks an alcohol component is relevant to the issues at hand. Such a system is not representative of the closest prior art, and applicants have failed to present a convincing argument as to why properties resulting from such a different system should be given weight. Applicants' have provided no explanation as to how the absence of allophanate groups within the system lacking an alcohol component should be treated or considered, in view of the fact that the prior art and claims clearly provide for the presence of such groups.

Applicants' response seems to argue that one would expect a linear progression in properties from a system that does not contain alcohol to one that contains alcohol in increasing amounts and that

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the declaration shows that this is not the case. However, this position is flawed, because one of ordinary skill would not have expected that a linear progression would result from the comparison of such radically different systems (i.e., those derived from alcohol compared to those not derived from alcohol).

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

R. Sergent  
April 13, 2003

  
**RABON SERGENT**  
**PRIMARY EXAMINER**